

Masaaki TSUJI, S.N. 09/394,661
Page 5

Dkt. No. 2271/60220

REMARKS

The application has been reviewed in light of the Office Action dated November 25, 2005. Claims 3-5 were pending, with claims 1 and 2 having previously been canceled, without prejudice or disclaimer. By this Amendment, new dependent claims 6-9 have been added. Accordingly, claims 3-9 are now pending, with claims 3 and 5 being in independent form.

Claims 3-5 were rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent 6,075,920 to Kawamura et al.

Applicant has carefully considered the Examiner's comments and the cited art, and respectfully submits that independent claims 3 and 5 of this application are patentable over the cited art, for at least the following reasons.

The information recorded on a recording medium (such as a compact disc) typically includes subcode data, in addition to header data and user data, and is in a predetermined format for each frame of data. The subcode data facilitates access of the user data on the recording medium, and can include timing information components and other information components (such as copy protection information, sector number information, graphics information, text information, etc.). The timing information components are used to maintain timing between subcode data and user data on the recording medium.

This application relates to automatic generation of subcode data for a recording medium. Applicant devised techniques for automatic generation of subcode data wherein commands for the automatic generation of the time information type subcode data and commands for the automatic generation of other types of subcode data are stored in memory

Masaaki TSUJI, S.N. 09/394,661
Page 6

Dkt. No. 2271/60220

and retrieved from memory when the subcode generating means is ready to perform the stored command. These features are included in independent claim 3 of the present application.

Kawamura, as understood by Applicant, is directed to techniques for recording subcode data along with user data onto a recording medium. Kawamura proposes a data recording apparatus 1 wherein time code information may be obtained from an external source 2 (a video tape player which reproduces video, audio and caption data along with associated subcode information from a tape), or from generator 9 which generates time code information based on a command received directly from control unit 20. The control unit 20 controls a switching circuit 10 to supply time code information to subcode encoder 11 (i) from the external source 2, if it is available from the external source 2, or (ii) from the generator 9, if it is not available from the external source 2.

The command from the control unit is never stored. Contrary to the contention in the Office Action, said command simply is not "inherently" saved to memory within the system. The control unit must determine the command on the fly because the control unit sends the command to the generator 9 to generate time code information, only if time code information is not available from the external source 2 (see Kawamura, column 10, lines 42-45).

Fig. 6 of Kawamura proposes a data structure of the subcode generated by the data recording apparatus, that is, sector number occupies 4 bytes in the subcode, time code 4 bytes, and 6 spare bytes remain in the subcode. Fig. 6 does not show (and the corresponding discussion in Kawamura does not disclose or suggest), however, storage in memory of

Masaaki TSUJI, S.N. 09/394,661
Page 7

Dkt. No. 2271/60220

commands for automatic generation of a plurality of time information subcode component data and/or commands for automatic generation of a plurality of additional subcode component data.

Kawamura simply does not teach or suggest subcode generation wherein commands for automatic generation of a plurality of time information subcode component data are written collectively in a first area of the memory, and commands for automatic generation of a plurality of additional subcode component data are written collectively in a second area of the memory, as provided by the claimed invention of claim 3.

Independent claim 5 of the present application is directed to a subcode-data generating circuit which generates subcode data including subcode component data, wherein a toggle generating portion independently generates toggling data in which the state of the toggling data alternates between a high state and a low state at a predetermined period, and a selecting portion selects subcode component data or the toggling data for output. The application discusses an example of such a subcode-data generating circuit at page 47, line 19 through page 49, line 8 (for generating subcode P data).

The Office Action states that the elements (such as element 9) proposed by Kawamura for generating subcode components which are delivered to the subcode encoder 11 constitute toggle generating portions. However, although the stream of subcode components generated by such elements may change from a field of bits to a different field of bits, such elements of Kawamura do not generate toggling data in which the state of the toggling data alternates between a high state and a low state at a predetermined period, as provided by the claimed invention of claim 5 of the present application.

Masaaki TSUJI, S.N. 09/394,661
Page 8

Dkt. No. 2271/60220

Kawamura simply does not disclose or suggest a toggle generating portion independently generates toggling data in which the state of the toggling data alternates between a high state and a low state at a predetermined period, as provided by the claimed invention of claim 5 of the present application.

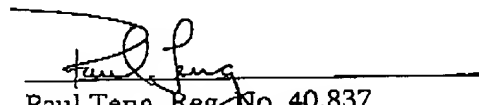
Accordingly, for at least the above-stated reasons, Applicant respectfully submits that independent claims 3 and 5, and claims depending therefrom, are allowable, and that the application is now in condition for allowance.

In view of the remarks hereinabove, Applicant submits that the application is now in condition for allowance. Accordingly, Applicant earnestly solicits the allowance of the application.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Office is hereby authorized to charge any fees that may be required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Respectfully submitted,


Paul Teng, Reg. No. 40,837
Attorney for Applicant
Cooper & Dunham LLP
Tel.: (212) 278-0400